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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,374	02/20/2004	Sangkeun Rhee	H0004297 (4760)	2395
7590 07/18/2006			EXAMINER	
Richard S. Roberts Roberts & Roberts, L.L.P. Attorneys at Law P.O. Box 484 Princeton, NJ 08542-0484			O HERN, BRENT T	
			ART UNIT	PAPER NUMBER
			1772	
DATE MAILED: 07/18/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/783,374

Applicant(s)

RHEE ET AL.

Examiner

Brent T. O'Hern

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-13, 15-28, 30, 32-41 and 43-52 is/are pending in the application.
- 4a) Of the above claim(s) 36-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-13, 15-28, 30, 32-41 and 43-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 27 April 2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-35 in the reply filed on 27 April 2006 is acknowledged. The traversal is on the ground(s) that the examiner provided no showing of distinctness. This is not found persuasive because as the applicant stated in Paragraph 2 of the Office Action dated 26 April 2006, the process can be used to make multilayered structures with other polymers, such as fluoropolymers.

The requirement is still deemed proper and is therefore made **FINAL**.

***Drawings/Abstract/IDS***

2. The objections to the Drawings, Abstract and IDS have been withdrawn due to Applicant's arguments and submission of new IDS.

**WITHDRAWN REJECTIONS**

3. The 35 USC 102 rejections of claims 1-5, 8-13, 16-17, 19-23, 26, 28-30 and 32-35 of record in the Office Action mailed 26 April 2006, page 3, paragraph 3, have been withdrawn due to Applicant's amendments in the Paper filed 27 April 2006.

4. The 35 USC 103 rejections of claims 6-7 of record in the Office Action mailed 26 April 2006, page 5, paragraph 4, have been withdrawn due to Applicant's amendments in the Paper filed 27 April 2006.

5. The 35 USC 103 rejections of claims 14 and 31 of record in the Office Action mailed 26 April 2006, page 5, paragraph 5, have been withdrawn due to Applicant's amendments in the Paper filed 27 April 2006.

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6. The 35 USC 103 rejections of claims 15 and 18 of record in the Office Action mailed 26 April 2006, page 6, paragraph 6, have been withdrawn due to Applicant's cancellation of claims 14 and 31 in the Paper filed 27 April 2006.

7. The 35 USC 103 rejections of claims 24-25 and 27 of record in the Office Action mailed 26 April 2006, page 7, paragraph 7, have been withdrawn due to Applicant's amendments in the Paper filed 27 April 2006.

### **NEW REJECTIONS**

#### **35 USC 103(a) Rejections**

8. Claims 1-5, 9-13, 15-23, 26, 28, 30 and 32-35 and 43-32 are rejected under 35 USC 103(a) as being unpatentable over Hirose et al (US 5,532,030) in view of Kawachi (US 6,656,601)

See page 3, para. 3, page 5, para 5, and page 6, para 6 of the previous Office Action for the column and line numbers and the explanations of where the references teach the limitations of current claims 1-5, 9-13, 15-23, 26, 28, 30 and 32-35 and 43-32.

Regarding amended claims 1, 9 and 30, Hirose ('030) teaches the limitations discussed above however fails to expressly disclose wherein the adhesive tie layer consists essentially of a combination of at least one tackifier and at least one unmodified ethylene/alpha-olefin and wherein the thermoplastic polymer consists essentially of a cyclic olefin copolymer.

However, Kawachi ('601) teaches wherein it is well known in the art to use an unmodified ethylene/alpha olefin for the purpose of having better melt tension and better moldability (*See col. 9, ll. 23-26*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to modify the adhesive tie layer in the multilayer film of Hirose ('030) by substituting in an unmodified ethylene/alpha olefin copolymer in order to have a multilayer film with better melt tension and moldability.

Regarding the tie layer and the thermoplastic cyclic olefin copolymer. Hirose ('030) teaches adhesive tie layer comprising a combination of at least one tackifier and at least one unmodified ethylene/alpha-olefin for the purpose of adhering the layers together and a thermoplastic polymer of a cyclic olefin copolymer (*see col. 1, ll. 58-64*).

Therefore, as a matter of obvious preference, it would have been obvious to modify the material to consist essentially of a combination of at least one tackifier and at least one unmodified ethylene/alpha-olefin and thermoplastic polymer of a cyclic olefin copolymer.

9. Claims 6-7 are rejected under 35 USC 103(a) as being unpatentable over Hirose et al (US 5,532,030) in view of Kawachi (US 6,656,601) and Tsai et al. (US 2003/0008152).

See page 5, para. 4 of the previous Office Action for the column and line numbers and the explanations of where the references teach the limitations of current claims 6-7.

10. Claims 24-25 and 27 are rejected under 35 USC 103(a) as being unpatentable over Hirose et al (US 5,532,030) in view of Kawachi (US 6,656,601) and Bennett (US 5,583,192).

See page 7, para. 7 of the previous Office Action for the column and line numbers and the explanations of where the references teach the limitations of current claims 24-25 and 27.

### **ANSWERS TO APPLICANT'S ARGUMENTS**

11. In response to Applicant's argument (*p. 10, par. 3, ll. 1-4 and para. 4 to p. 13, para. 1*) that Hirose ('030) does not teach an adhesive that consists essentially of a combination of an unmodified copolymer of amended claims 1 and 30, it is noted that the combination of Hirose ('030) and Kawachi ('601) teach these new limitations (See col. 9, ll. 23-26 of Kawachi ('601) where it is well known in the art to use an unmodified ethylene/alpha olefin for the purpose of having better melt tension and better moldability. Furthermore, it would have been obvious to a person of ordinary skill in the art to have an adhesive tie layer that consists essentially of a the combination of claims 1 and 30 for the purpose of adhering the layers together (*see col. 1, ll. 59-64 of Hirose ('030)*)).
12. In response to Applicant's argument (*p. 13, paras. 2-3*) that Hirose ('030) and Tsai ('152) does not teach the film of claims 6-7, it is noted that Applicant's arguments are not found persuasive for the reasons as stated on page 5, para. 4 of the previous Office Action.
13. In response to applicant's argument (*p. 14, paras. 1-2*) that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge

which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant's arguments are not persuasive.

**14.** In response to Applicant's argument (*p. 14, par. 3*) that Hirose ('030) and Kawachi ('601) do not teach the limitations of claims 14 and 31 (cancelled by Applicant), it is noted that Hirose ('030) and Kawachi ('601) do teach the limitations as discussed above in reference to claims 1 and 30.

**15.** In response to Applicant's argument (*p. 15, para. 1*) that neither Hirose ('030), Kawachi ('601) nor Tsai ('152) teach the limitations of new claims 46-52, it is noted that increasing or decreasing the number of layers, with an outer polypropylene layer and adhering these layers with various adhesives and each comprising a copolymer and a tackifier is well known in the art and clearly obvious.

**16.** In response to Applicant's argument (*p. 16, para. 2*) that Hirose does not teach claims 15 and 18 as a result of Applicant's amendments, it is noted that the combination of Hirose ('030) and Kawachi ('601) teach the amended limitations as discussed above.

**17.** In response to applicant's argument (*p. 16, para. 3*) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, all of the references are directed to films and adhesives for such films. Applicant's arguments are not persuasive.

18. In response to applicant's arguments (*p. 16, para. 4*) against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant's arguments are not persuasive.

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



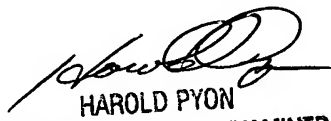
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BTO  
Brent T O'Hern  
Examiner  
Art Unit 1772  
July 10, 2006

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

7/10/06